# Consumer Costs and Patient Satisfaction of Availing Healthcare Services from Sir Salimullah Medical College Mitford Hospital

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## **Abstract**

Consumers contribute largely in getting healthcare in Bangladesh. This consumer cost, whether formal or informal forces a large section of population into poverty. Objective of this study was to capture the self-reported consumer cost of illness as well as satisfaction regarding availed healthcare services among patients admitted in Sir Salimullah Medical College Mitford Hospital. This cross sectional survey was conducted over a period of 7 months from November 2022 to May 2023 among the indoor patients of medicine, surgery, orthopedics, pediatrics, and Gynecology & Obstetrics departments in SSMCMH. Data was collected by using a semi-structured questionnaire, conducting face to face interview during discharge of indoor patient from a sample selected by stratified sampling method. KII were conducted among the administrative personnel and healthcare provider to get a supply side insight of the factors responsible for consumer cost and satisfaction level among demand side. Almost every 3 in 4 (73.82%) respondents had to pay for any services, though only one fifth (18.1%) said the payment was at the high end. About 69.34% respondents had to buy medicine from outside. Patients paid highest for surgical care (Tk 12789.5) and lowest for orthopedic care (Tk 2936.667). There was significant difference between consumer cost of NVD and CS delivery (p=0.0008). This study found that outside facility outweighs inside facility cost, medicine, mostly investigation contributed the largest share. Nonmedical costs were a significant component of health expenditure. Though stake of informal tips (2%) were a smaller portion compared to other cost, apparently it was a norm. It was found that consumer cost had significant difference with age (p=0.0005), sex (p=0.02), monthly income (p=0.0001), but marital status, and year of education was not significant. Consumer satisfaction was seen to be largely dependent on amount they had to spend out of pocket along with providers behavior and cleanliness of the premises. The study suggested that although direct medical costs are of special importance and it is necessary to protect patients against such costs, patients usually encounter a variety of costs when receiving inpatient services. Findings of this study could help policy makers develop strategies within the health system to reduce the burden and ensure patient compliance.

**Key words:** Consumer cost, Out of pocket, Patient satisfaction, Patient compliance, Informal tips. Introduction:

In Bangladesh government health care services provided from public facilities are free for all. Hence, those who cannot afford it, financial protection for healthcare is perceived to be provided by government. Till today, OOPS payment dominate for healthcare financing, and its share increased 12.6% from 1997 to 2020 [10]. Worryingly, 16% of households in the country confront disputable expenditure to avail healthcare, and approximately 5% population slip into below poverty line every year [1,2,3,4].

With the aim to provide free health care to the population in and around Dhaka city, a government medical college hospital was established in the old part of Dhaka city on the bank of the Buriganga River. The hospital serves both indoor and outdoor treatments as well as pathological and diagnostic services, it was upgraded to 900 bed hospital in 2014, and the number of bed is too little to cope with the huge number of patients. On an average, 1100-1200 patients are treated indoor [5]. The catchment population of the Mitford Hospital is now, mainly the urban population from old Dhaka City and from the urban, peri-urban and rural people living in the other side of river Buriganga.

This study aimed to analyze the consumer cost on treatment of the people living in and around Dhaka city.

Only direct costs were considered as Consumer cost which included household expenditure on inpatient

hospitalization, hospital admission, medicine, diagnostic tests, transportation to health centers and caregivers' expenses. However, indirect costs such as the income loss of patients or the productivity loss of caregivers were not included in this analysis. The cost data covered admitted patients, their treatment expenditure-in and outside facility, formal charges, informal tips and cost of transport and food.

Medical care organizations are mainly providing curative care. They cost a lot and therefore should be cost effective [6]. In recent years, quality assurance has emerged as an internationally important aspect in the provision of health care services [7]. The health care system depends on availability, affordability, efficiency, feasibility, and other factors [8]. Consumer satisfaction is recognized as an important parameter for assessing the quality of patient care services. Consumer satisfaction regarding medical care organizations like Sir Salimullah Medical College Mitford Hospital (SSMCMH) is important to the provision of services to patients. So, we have designed the proposed study to assess consumer costs along with patient satisfaction with regard to clinical care in the inpatient department (major wards) of SSMCMH.

There are a few studies those have documented the utilization and OOPS in the rural areas of Bangladesh, but research on hospital based consumer cost and associated factors aiming urban population of Dhaka city are seldom found [9, 10, 11,12]. Evidence on various types of illness and concomitant expenditures is critical for defining costs at the facility level. This information is pertinent for betterment the health of urban population by safeguarding quality healthcare services [13].

# Methodology:

It was a cross sectional descriptive study conducted between November 2022 and May 2023 in SSMCMH of Dhaka, the respondents were the indoor patients or accompanying attendants of high turnout departments which are Medicine, Surgery, Gynaecology and Obstetrics, Paediatrics & Orthopedics Department. A semi structured questionnaire was used to capture the response from the clients by face to face interview and guided KII tool was developed and used to gather opinion from health managers and policy makers. Absconded, Dead, DORB, DOR patients were excluded. Stratified sampling technique was adopted and Slovin's formula was used to calculate a total sample size of 636. From each department allocated number of patients were taken randomly using admission register as sample frame during data collection period. Ethical approval was obtained from Ethical Review Board of SSMC. Written Informed consent was obtained from the respondents.

Data collection completed over 2 months. Information were collected on the socio-economic profile (Age, sex, marital status, education, family Income, Occupation), points of payment from own pocket of patients, and patient satisfaction. The qualitative data were collected through KII guidelines.

Data were analyzed in STATA 12. Descriptive statistics was used to summarize the socio-economic characteristics of the study participants. Extent of payments, patient satisfaction along with associated determinants were analyzed by Kruskal Wallis test.

## Result:

Respondents' average monthly income was 22590 Tk and expenditure was 18038 Tk.

Table i: Distribution of Consumer cost

| Consumer cost in Tk                    | Number of observation | Mean    | SD      |
|--|-----------------------|---------|---------|
| Inside Facility cost:                  | 636                   | 1166.28 | 3780.42 |
| Informal tips                          | 636                   | 224.73  | 613.60  |
| Cost outside facility:                 | 635                   | 3386.70 | 7505.62 |
| Drugs                                  | 400                   | 2373.25 | 5221.66 |
| Investigation                          | 338                   | 3546.92 | 5293.54 |
| One way transportation cost of patient | 630                   | 372.09  | 700.04  |
| Food and travel cost of the attendant  | 636                   | 1328.27 | 1746.03 |

Table i: Distribution of Consumer cost

The various aspects of consumer cost of the respondent are summarized in Table 1 above. Mean inside facility cost was 1166.29 (±3780.42) Tk. Mean of informal tips was 224.733(±613.60) Tk. Regarding outside facility cost, mean cost was 3386.71(±7505.62) Tk. Out of pocket drug cost was 2373.25(±5221.66)Tk. Regarding investigation, mean cost was 3546.92(±5293)Tk.

Figure 1: Perception on the payment made by the patient for obtaining services

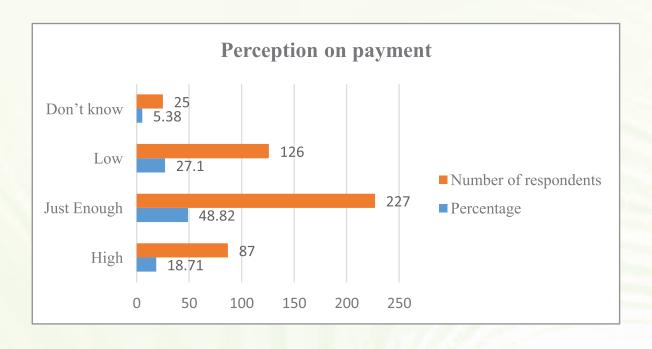


Figure 1 above represents that about 227 (48%) perceived that the payment was just enough and 87(18.71%) perceived that the payment was high. The study is a reflection of popular perception on income and expenditure ratio. The more is the income, the more is spending.

Table ii: Association of consumer cost with socioeconomic status

| Age group                      | Number of observation | Average cost | SD       | p value |
|--------------------------------|-----------------------|--------------|----------|---------|
| Under 5                        | 24                    | 12936.67     |          | 0.0005* |
| 5 to 14                        | 43                    | 3885.27      |          |         |
| 15-60                          | 509                   | 5685.99      |          |         |
| Above 60                       | 60                    | 8471.83      |          |         |
| Duration of education in years |                       |              |          |         |
| 0 (Uneducated)                 | 132                   | 7991.09      | 14352.7  | 0.47    |
| 1-5                            | 205                   | 5925.80      | 11597.67 |         |
| 6-10                           | 205                   | 5715.25      | 7992.32  |         |
| 11-12                          | 66                    | 4965.45      | 7401.11  |         |
| >12                            | 28                    | 3966.60      | 4061.51  |         |

<sup>\*</sup>Significant(p<0.05)

The study found that the average consumer cost in male was 7433.24 ( $\pm 11285.03$ ) and in female was  $5372.70(\pm 9733.49)$ . Male had to pay more than female (p= 0.02), under 5 patient had the same experience (p=0005). While marital status (p=0.20) and year of education (p=0.47) had no statistically significant difference.

When paying for consumer costs, perception of payment varies. A high perception of payment indicated that they had to pay the maximum (P=0.0001). Consumer costs were higher for respondents with monthly incomes over 50000 Tk. While 96.69% of respondents felt that they were not at all satisfied with telling their doctor about their concerns, one-third of respondents thought that the doctors' behavior was great. 74% of respondents thought the provider's quality was high. The majority, 78.43%, thought that hospital privacy protection was very unsatisfactory. Nearly half of the respondents said that the hygiene of the hospital and the restrooms was poor. The majority said that waiting times weren't too long and that worker demeanor was good.

## Discussion

As commonly opined, most patients (73.8%) were required to pay for the treatment. Of those, 64.76% received a receipt after making the payment, and 48% said the amount was reasonable while 18.71% thought it was excessive. Consumer expenses were split into two groups: Interior facility expenses totaled, on average, 1166.29 Tk. The majority of respondents (69.34%) purchased medications outside of hospitals at the expense of the outside organization. Together, drug use and the cost of the investigation raised the investigation's cost. However, the high cost of visiting government institutions is primarily due to the high cost of medicines, which is a greater burden for the poor and adds to health inequities. [14] One-fourth of the patients who sought treatment at SSMCH were required to provide unofficial tips. Unofficial suggestions from patients were given to the staff, including the cleaner, ward boy, and aya. None of the patients brought up paying nurses or doctors on the side. The highest gratuities were given to the surgical department, while the lowest ones were given to obs and gynecology. Although the payment of informal tips and perceived economic standing did not differ significantly from one another, department-specific informal tips did differ. The cost of surgery was higher for respondents, despite being the lowest in medicine. The sum varied according to the informal services that participants were expected to pay for. There was no information about unofficial payments to doctors in public hospitals in an Iranian study. [15]

### Conclusion

According to this report, consumer cost outside facilities is greater than the cost of interior, with medicine and investigation making up the largest portion. Notable portion of health spending was spent on non-medical expenses. Even though the stake of informal tips was lower than other stakes, it was nevertheless upheld. Customers' out-of-pocket expenses, provider behavior, and the facility's cleanliness were all found to play a significant role in determining how satisfied they were with the experience.

This study supports the widely held belief that patients are less satisfied with health care services, which is of growing concern. They have to deal with multifaceted issues, including treatment costs that are unpredictable, and the possibility of neglect because medical experts are less receptive.

### Recommendations

1. The government should increase resource allocation to curb the out of pocket expenditure to purchase drugs from outside facility. Stringent monitoring and oversight should be in place for appropriate procurement, distribution and availability of medicine at the facility. 2. Strengthening hospital social services is necessary to advance patient welfare and empowerment. 3. Increasing Capacity of laboratory investigation in hospital is crucial for reducing burden of consumer cost. To satisfy the demands of a huge number of in-patients, the number of human resource, logistics and equipment should be fulfilled according to the increased no of beds in expanded form of the hospital. 4. Service orientation of staffs should be a key priority as one of the critical factor influencing patient satisfaction in hospitals. Number of Cleaners should be increased as per increased number of patient beds to ensure patient satisfaction. 5. Customized training program should be in place for health care providers to improve cultural awareness and customer service skills in order to deliver high-quality care and guarantee patient happiness.6. Hospital authority should create a robust monitoring and assessment cell to prevent fraud and provision of informal tips.

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